AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Food Chemistry						
Course Code	VBH501		Couse Level		Second Cycle (Master's Degree)		
ECTS Credit	6	Workload	152 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Food components (protein, fat, carbohydrate, mineral, vitamin), reactions of matter in food composition, chemical analyses of foods						
Course Content	Food composition (protein, fat, carbohydrate, mineral, vitamin). Reactions of matter in food composition and chemical analyses of foods						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study, Problem Solving				
Name of Lecturer(s)	Lec. Cemil ŞAHİNER						

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Altuğ, T. Gıda Katkı Maddeleri, İzmir, 2001.
2	M. DEMİRCİ, Gıda Kimyası, 2010
3	Fennema, O.R. FoodChemistry, Third Edition, RevisedandExpanded, MarcelDekker, Inc., New York, 1996
4	James, C.S. Analytical chemistry of foods. An Aspen Publication, Gaithersburg, Maryland, 1999.
5	Belitz, H.D., Grosch, W. FoodChemistry. Berlin, 1999.
6	Tayar, M, Çıbık, R. Gıda Kimyası, Bursa, 2011.
7	Bilişli A. Gıda Kimyası, 2009.
8	Saldamlı, İ. Gıda Kimyası. Hacettepe Üniversitesi Yayınları – Ankara, 1998.

Week	Weekly Detailed Course Contents	
1	Theoretical	Chemical and physical properties of water, water in foods
	Practice	Sampling for water analysis and physical analysis of water
2	Theoretical	Clasification and properties of carbonhydrates
	Practice	Chemical analyses of water
3	Theoretical	Functions of carbohydrates in foods
	Practice	Water activity, moister and ash analyses of foods
4	Theoretical	Clasification and properties of proteins
	Practice	Determination of protein in meat and meat products
5	Theoretical	Functions of proteins in foods
	Practice	Determination of protein in milk and dairy products
6	Theoretical	Clasification and properties of enzyms, functions of enzyms in foods
	Practice	Enzyme analyses of milk
7	Theoretical	Clasification and properties of lipids
	Practice	Determination of lipid in meat and meat products
8	Intermediate Exam	Midterm
9	Theoretical	Functions of lipids in foods
	Practice	Determination of lipid in milk and dairy products
10	Theoretical	Vitamins
	Practice	Calculation of energy in meat and meat products
11	Theoretical	Minerals
	Practice	Calculation of energy in milk and dairy products
12	Theoretical	Natural toxins and contaminants

12	Practice	Determination of pH and acidity in foods
13	Theoretical	Phenolic compounds
	Practice	Determination of salt in foods
14	Theoretical	Natural taste compounds in foods
	Practice	Determination of preservatives and platform tests in milk
15	Theoretical	Food additives
	Practice	Overview and review of practical works carried out by

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	4	0	9	36
Reading	14	0	2	28
Midterm Examination	1	10	1	11
Final Examination	1	20	1	21
			Total Workload (Hours)	152
			[Total Workload (Hours) / 25*] = **ECTS**	6

25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To learn foodstuff
2	To learn foods' components
3	To learn reactions of matter in food composition
4	To learn working principles in a chemistry laboratory
5	To learn chemistry laboratory equipments
6	To have the ability of conducting chemical analyses of foods

Programme Outcomes *(Food Hygiene and Technology (Veterinary Medicine) Master)*

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Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5	L6
P1	5	5	5	5	5	5
P3		1	4	1	1	2
P4	3	3	3	1	1	1
P5	1	1	1	1	1	1
P6	1	1	1			
P7	2	2	2	1	1	1
P9	4	4	4	1	1	
P10	5	5	5			
P11					5	5

P12				4	1	5
P13					1	5